

Amendments to the Claims

1 Claim 1 (currently amended): A computer-implemented method of uniquely identifying resources,
2 comprising:

3 modeling the resources using a hierarchical schema, wherein classes in the hierarchical
4 schema correspond to resource types and wherein instances in the hierarchical schema represent
5 individual resources, each instance being defined according to a class definition of a selected one
6 of the classes that corresponds to the resource type of the individual resource represented by the
7 instance; and

8 defining, in the class definition of a topmost class of the hierarchical schema, a naming rule
9 property and an instance identity property, the naming rule property for storing a naming rule for
10 each of the classes in an associated naming rule property value, and the instance identity property
11 for storing an identity of each of the instances in an associated instance identity property value,
12 wherein:

13 each class at levels of the hierarchical schema beneath the topmost class inherits
14 the naming rule property and the instance identity property, thereby requiring each class in the
15 hierarchical schema to store a class-specific naming rule as the value of the naming rule property
16 and each instance of each of the classes to store an instance-specific identity as the value of the
17 instance identity property;

18 the naming rule for each class specifies at least one property defined in the class
19 definition of that class, and is used for creating the identity for each instance of that class; and
20 the naming rule for each of the classes is selected to ensure that the identity
21 created for each of the instances of each of the classes is unique within the hierarchical schema.

22 specifying a value of the naming rule property in each of the class definitions, wherein:

23 ————— the value of the naming rule property comprises at least one property name

24 selected from a collection of property names comprising the class definition;

25 ————— for each class definition, the selected at least one property name is selected to

26 ensure that each instance identity generated for the instances defined according to the class

27 definition is unique among all of the instances in the hierarchical schema;

28 ————— the value of the naming rule property specified in at least one of the class

29 definitions comprises at least two of the property names selected from the collection of property

30 names comprising the class definition; and

31 ————— the value of the naming rule property for at least two of the class definitions

32 differs; and

33 ————— for each of the modeled resources, specifying a value of the instance identity property in

34 the instance which represents that resource, wherein:

35 ————— the value of the instance identity is generated using the specified value of the

36 naming rule property for the class definition according to which that instance is defined; and

37 ————— the value of the instance identity specifies a class name of a particular one of the

38 classes that corresponds to the resource type of this resource and, for each of the at least one

39 property name defined as the value of the naming rule property in the class definition of the

40 particular one of the classes, a name and value pair comprising that property name and a property

41 value corresponding thereto for the resource represented by this instance.

Claim 2 (canceled)

1 Claim 3 (previously presented): The method according to Claim 1, further comprising locating a
2 particular instance that represents a particular resource using the value of the instance identity
3 property for that instance.

Claim 4 (canceled)

1 Claim 5 (currently amended): The method according to Claim 1, wherein:
2 the naming rule ~~property for at least a selected one of the class definitions~~ ~~classes~~ further
3 ~~comprises~~ specifies a scoping context selected to ensure that each of the ~~instance~~ identities
4 generated created using that naming rule for the instances defined according to the class definition
5 are unique within the scoping context; and
6 the value of the instance identity property for each of the instances defined according to
7 ~~that class definition~~ created using that naming rule further ~~comprises~~ specifies the scoping context.

Claim 6 (canceled)

1 Claim 7 (currently amended): The method according to Claim 5, wherein:
2 the scoping context comprises a scoping class name that identifies one of the classes that is
3 distinct from the selected one of the classes and, for each of the at least one property [[name]]
4 specified as the value of in the naming rule for the property in the class definition of the identified
5 distinct one of the classes, a name and value pair comprising that property [[name]] and [[the]] a

6 corresponding value, for the resource represented by corresponding thereto for a particular
7 instance of the identified distinct one of the classes, of that property.

Claim 8 (canceled)

1 Claim 9 (currently amended): The method according to Claim 7, wherein:
2 the naming rule property for at the least the selected one of the class definitions classes
3 further comprises specifies a root context corresponding to a root of the hierarchical schema to
4 ensure that each of the instance identities created using that naming rule generated for the
5 instances defined according to the class definition are unique within the scoping context within the
6 root context; and
7 the value of the instance identity property for each of the instances defined according to
8 that class definition created using that naming rule further comprises specifies the root scope.

1 Claim 10 (previously presented): The method according to Claim 9, wherein the root scope
2 comprises a domain name.

1 Claim 11 (currently amended): The method according to Claim 1, wherein the value of the
2 naming rule property for each of the classes is specified using a structured document.

1 Claim 12 (currently amended): The method according to Claim 1, wherein the value of the
2 naming rule property for each of the classes is specified using a structured markup language.

1 Claim 13 (original): The method according to Claim 1, wherein the hierarchical schema is an
2 object-oriented schema.

Claims 14 - 16 (canceled)

1 Claim 17 (currently amended): A method of generating unique resource identities, comprising:
2 determining a particular resource for which a unique resource identity is to be generated;
3 accessing a class hierarchy with which resources are modelled, thereby obtaining a class
4 definition for a class that corresponds to a resource type for the particular resource;
5 locating, in the class definition, a class-specific naming rule that specifies how identities for
6 instances of the class are to be generated, wherein:
7 the naming rule is specified in the class definition as a value of a naming rule
8 property that is inherited, by each class in the class hierarchy, from a topmost one of the classes in
9 the class hierarchy;
10 the naming rule specifies at least one property name, each of the at least one
11 specified property name selected from a collection of property names comprising the class
12 definition, the selecting ensuring to ensure that each of the instances of the class are uniquely
13 identified within the class hierarchy;
14 the naming rule specified in at least one of the class definitions comprises at least
15 two of the property names selected from the collection of property names comprising the class
16 definition; and

the value of the naming rule property for at least two of the class definitions differs; and

generating the identity for the particular resource using the located naming rule[,,] by
appending wherein:

the identity is generated according to the located naming rule; and

the generated identity specifies a class name of the class that corresponds to the resource type for the particular resource [[and]] to a collection of name-value pairs, the collection of name-value pairs comprising, for each of the at least one property name specified by the located naming rule, a name and value pair comprising that property name and a property value corresponding thereto for the particular resource.

Claim 18 (new): The method according to Claim 1, wherein the value of the instance identity property for each of the instances specifies a class name of a particular one of the classes that corresponds to the resource type of the resource represented by that instance, and, for each of the at least one property specified in the naming rule for the particular class, a name and value pair comprising the property and a corresponding value, for the resource represented by this instance, of that property.

Claim 19 (new): The method according to Claim 1, further comprising:

creating an identity for a particular one of the resources, using the naming rule for the class that corresponds to the resource type of the particular resource; and

storing the created identity as the value of the instance identity property for an instance

5 which represents the particular resource.

1 Claim 20 (new): A system for uniquely identifying resources, comprising:
2 a hierarchical schema that models the resources, wherein classes in the hierarchical schema
3 correspond to resource types and wherein instances in the hierarchical schema represent individual
4 resources, each instance being defined according to a class definition of a selected one of the
5 classes that corresponds to the resource type of the individual resource represented by the
6 instance; and

7 instructions which are executable, using a processor of a computer, for defining, in the
8 class definition of a topmost class of the hierarchical schema, a naming rule property and an
9 instance identity property, the naming rule property for storing a naming rule for each of the
10 classes in an associated naming rule property value, and the instance identity property for storing
11 an identity of each of the instances in an associated instance identity property value, wherein:

12 each class at levels of the hierarchical schema beneath the topmost class inherits
13 the naming rule property and the instance identity property, thereby requiring each class in the
14 hierarchical schema to store a class-specific naming rule as the value of the naming rule property
15 and each instance of each of the classes to store an instance-specific identity as the value of the
16 instance identity property;

17 the naming rule for each class specifies at least one property defined in the class
18 definition of that class, and is used for creating the identity for each instance of that class; and

19 the naming rule for each of the classes is selected to ensure that the identity
20 created for each of the instances of each of the classes is unique within the hierarchical schema.

1 Claim 21 (new): The system according to Claim 20, wherein the value of the instance identity
2 property for each of the instances specifies a class name of a particular one of the classes that
3 corresponds to the resource type of the resource represented by that instance, and, for each of the
4 at least one property specified in the naming rule for the particular class, a name and value pair
5 comprising the property and a corresponding value, for the resource represented by this instance,
6 of that property.

1 Claim 22 (new): The system according to Claim 20, further comprising instructions which are
2 executable, using the processor of the computer, for:

3 creating an identity for a particular one of the resources, using the naming rule for the
4 class that corresponds to the resource type of the particular resource; and
5 storing the created identity as the value of the instance identity property for an instance
6 which represents the particular resource.

1 Claim 23 (new): A computer program product for uniquely identifying resources, the computer
2 program product embodied on one or more computer-readable media and comprising computer
3 readable program code for:

4 modeling the resources using a hierarchical schema, wherein classes in the hierarchical
5 schema correspond to resource types and wherein instances in the hierarchical schema represent
6 individual resources, each instance being defined according to a class definition of a selected one
7 of the classes that corresponds to the resource type of the individual resource represented by the

8 instance; and

9 defining, in the class definition of a topmost class of the hierarchical schema, a naming rule
10 property and an instance identity property, the naming rule property for storing a naming rule for
11 each of the classes in an associated naming rule property value, and the instance identity property
12 for storing an identity of each of the instances in an associated instance identity property value,
13 wherein:

14 each class at levels of the hierarchical schema beneath the topmost class inherits
15 the naming rule property and the instance identity property, thereby requiring each class in the
16 hierarchical schema to store a class-specific naming rule as the value of the naming rule property
17 and each instance of each of the classes to store an instance-specific identity as the value of the
18 instance identity property;

19 the naming rule for each class specifies at least one property defined in the class
20 definition of that class, and is used for creating the identity for each instance of that class; and

21 the naming rule for each of the classes is selected to ensure that the identity
22 created for each of the instances of each of the classes is unique within the hierarchical schema.

1 Claim 24 (new): The computer program product according to Claim 23, wherein the value of the
2 instance identity property for each of the instances specifies a class name of a particular one of the
3 classes that corresponds to the resource type of the resource represented by that instance, and, for
4 each of the at least one property specified in the naming rule for the particular class, a name and
5 value pair comprising the property and a corresponding value, for the resource represented by this
6 instance, of that property.

1 Claim 25 (new): The computer program product according to Claim 23, further comprising
2 computer-readable program code for:
3 creating an identity for a particular one of the resources, using the naming rule for the
4 class that corresponds to the resource type of the particular resource; and
5 storing the created identity as the value of the instance identity property for an instance
6 which represents the particular resource.